

60,137-163
115-3189-U**REMARKS**

The Examiner rejected claims 1, 2, 4, 5, 7-9, 21-24, 26-28 and 64-67 under 35 U.S.C. §103(a) as being obvious over Moysan (United States Patent No. 5,413,874) in view of European Patent Application No. 0,486,711. Claims 1, 2, 4, 5, 7-9, 21-24, 26-28 and 64-67 also stand rejected under 35 U.S.C. §103(a) as being obvious over Welty (United States Patent No. 5,922,478) in view of EP '711. Claims 10-20 stand rejected under 35 U.S.C. §103(a) as being obvious over Welty '478 in view of EP '711 and further in view of Pudem (United States Patent No. 5,558,759).

Both Moysan and Welty disclose an article including a nickel layer 13 disposed on a substrate 12 by electroplating. A layer of a non-precious refractory metal 22 is disposed by physical vapor deposition. Neither Moysan nor Welty disclose the step of subjecting the article having the electroplated nickel layer 13 to pulses of air to dry and clean the electroplated article. European Patent '711 discloses an apparatus for blowing a liquid off an article by pulsating compressed air jets on the article. Pudem discloses a finishing process for a base metal substrate including the steps of striking a component with copper to form a copper plate, electroplating the component with nickel, electroplating the component with brass, and then dipping the component in a chromate bath. The Examiner contends that it would be obvious to employ pulsating air jets as suggested by EP '711 in Moysan.

Neither Moysan nor Welty suggest the step of employing pulsating air jets to clean an electroplated article. Moysan and Welty do not disclose any step of cleaning or drying the electroplated surface, or any other surface of the article. Nothing in either reference discloses or suggests employing pulses of air to dry and clean an electroplated article surface. Applicant's claims are not obvious, and Applicant respectfully requests that the rejection be withdrawn.

Additionally, Applicant's claims provide many additional benefits over the prior art, and therefore Applicant's claims are not obvious. By subjecting an electroplated surface with pulses of air to dry and clean the electroplated surface as claimed by Applicant, many additional benefits and advantages over the prior art are provided. As disclosed in Applicant's specification on pages 1 and 2, the vapor deposited layer coated on an electroplated layer is thin, and therefore any water spots or surface defects caused by the electroplating process can show through the thin vapor deposited layer. To avoid this problem in the prior art, the electroplated article has been

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cleaned with a water based cleaning system. Nitrogen drying has been employed to dry the article. This method is expensive and is not always successful. Alternately, the article is hand dried and cleaned, which is laborious and time consuming. Applicant's claims including the step of subjecting the electroplated article surface with pulses of air to dry and clean the electroplated surface eliminates the problems of the prior art and solves the problems of the prior art. Applicant's claims are not obvious, and Applicant respectfully requests that the rejection be withdrawn.

Thus, claims 1, 2, 4, 5, 7-24, 26-36 and 65-67 are in condition for allowance. No additional fees are seen to be required. If any additional fees are due, however, the Commissioner is authorized to charge Deposit Account No. 50-1482, in the name of Carlson, Gaskey & Olds, P.C., for any additional fees or credit the account for any overpayment. Therefore, favorable reconsideration and allowance of this application is respectfully requested.

Respectfully Submitted,

CARLSON, GASKEY & OLDS, P.C.

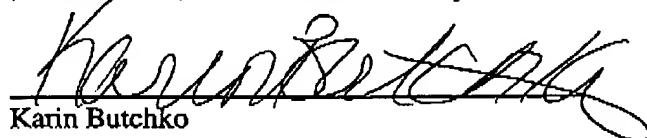


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CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, TC1700, Before Final, 703-872-9310 on May 27, 2003.


Karin Butchko

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